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CS-7861/LeA 36,055
Peter Schreier et al

Fig. 1

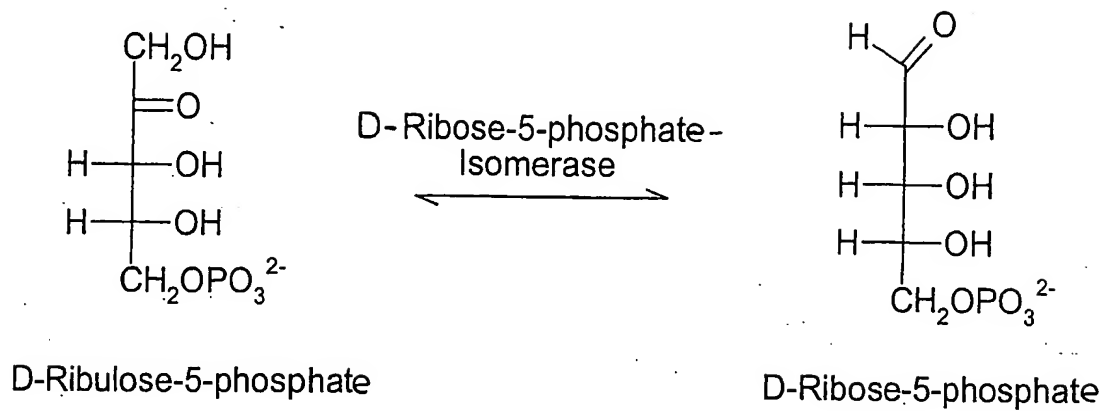
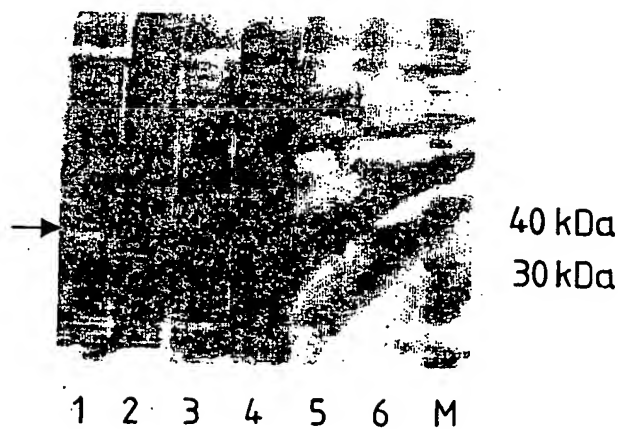


Fig. 2



CS-7861/LeA 36,055
Peter Schreier et al

Fig. 3

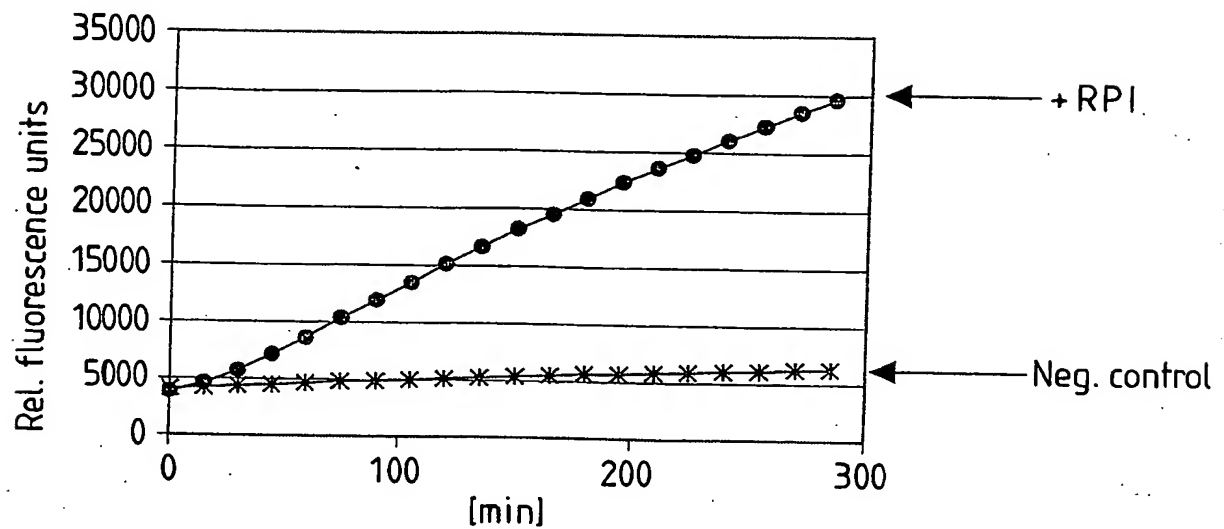
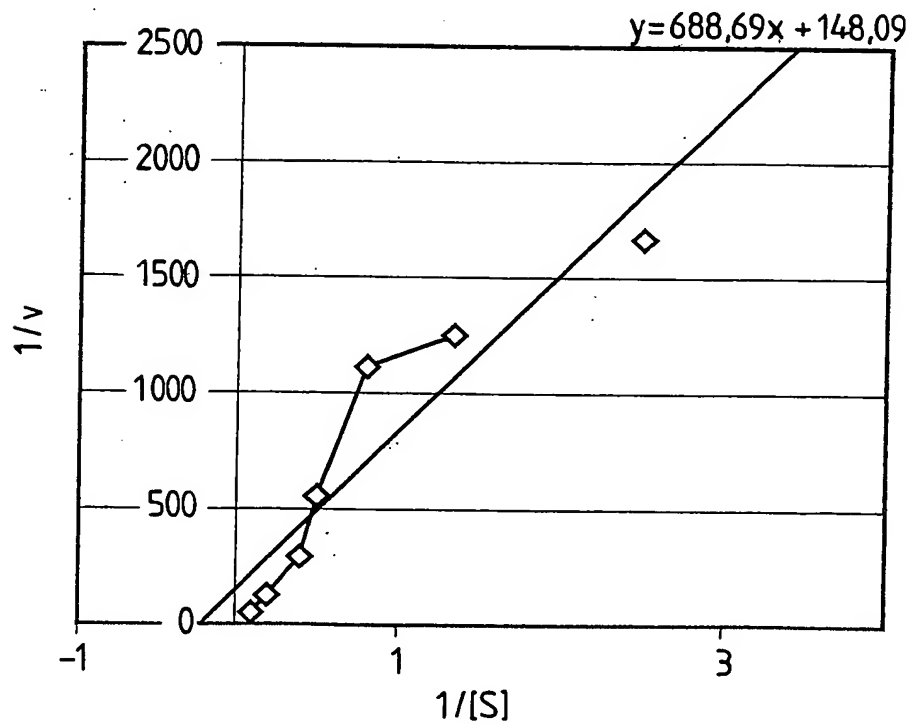
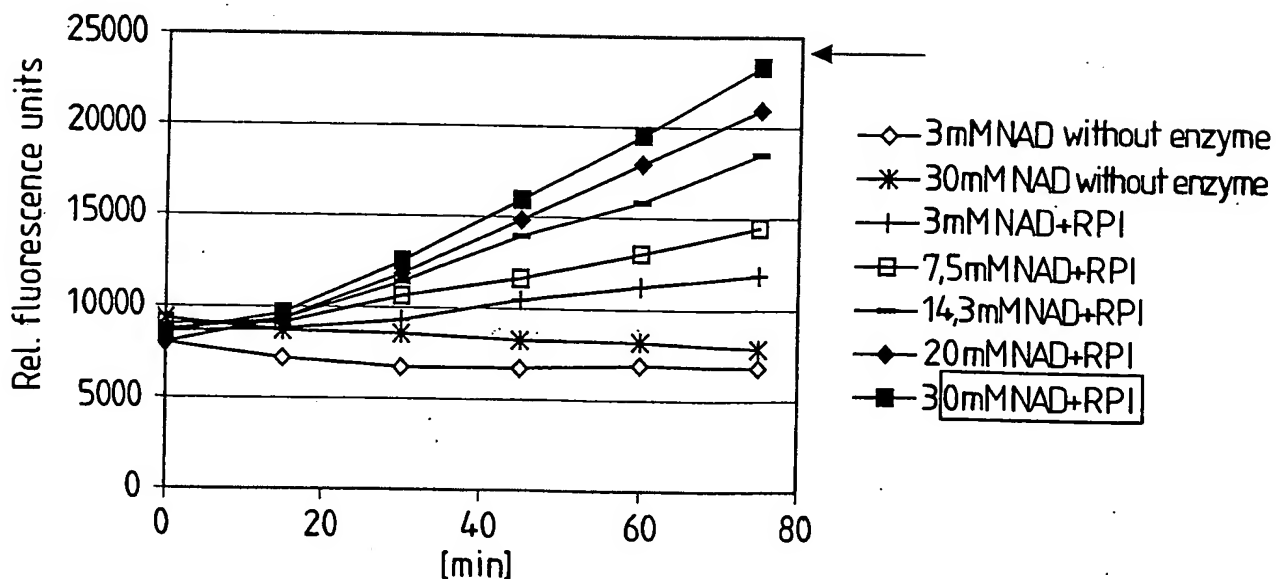


Fig. 4





CS7861/LeA 36,055
Peter Schreier et al

Fig. 7

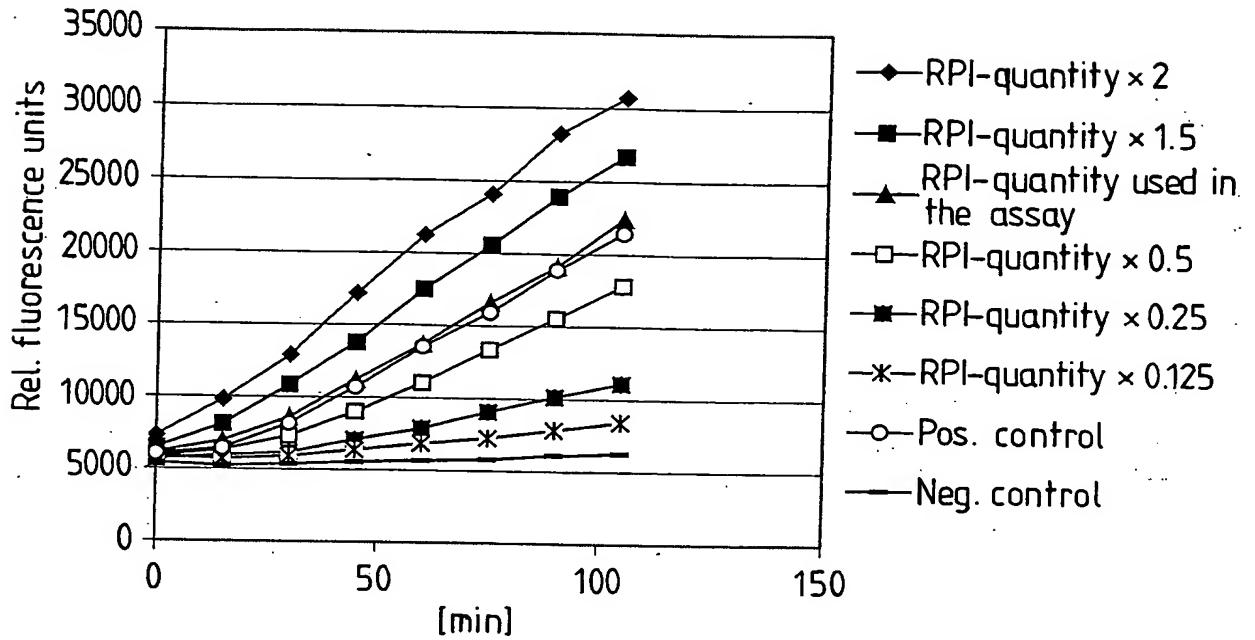
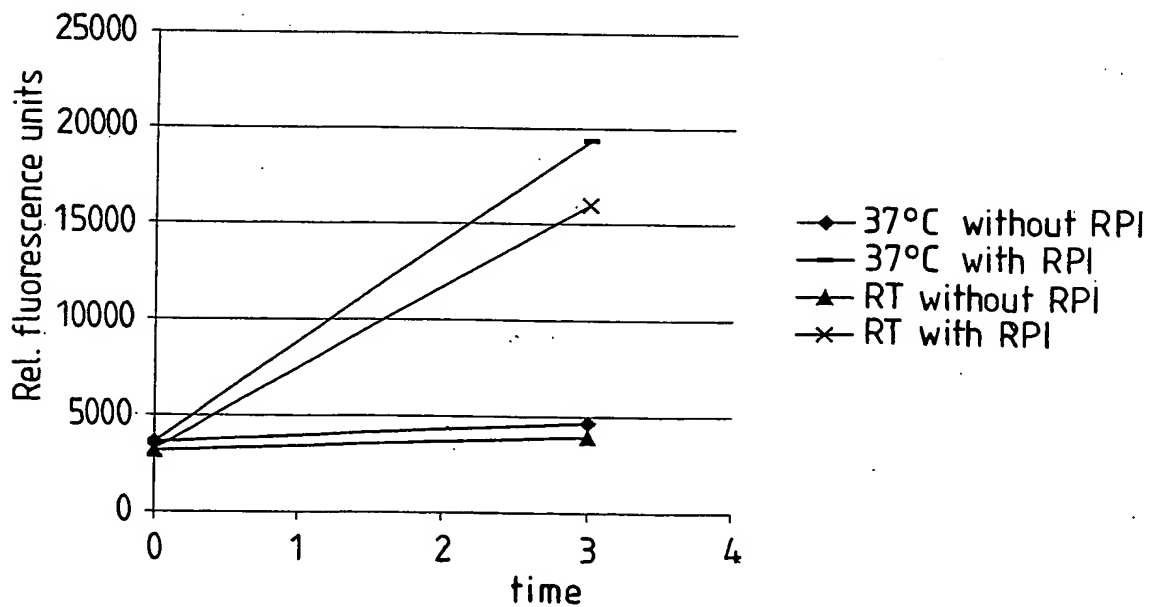


Fig. 8



CS-7861/LeA 32,055
Peter Schreier et al

Fig. 9

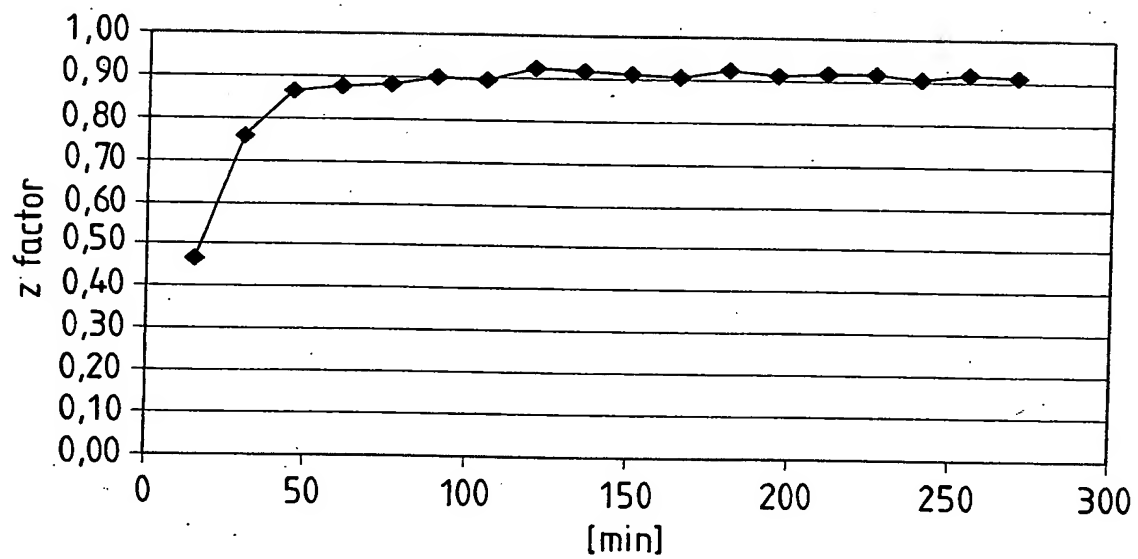


Fig. 10A

U. maydis	.....MQSRL LSLVSSHLVS KRCFIARSAA LAPLLLHPQR
LRLTCPRSFS	
S_pombe_144_12	.....
.....	
S_c_RKI1	.....
.....	
mouse_rpi	.....
.....	
drosophila_RPI	MTYGHVACLL QVFVENEINL SPDQSCMNCC GGCHDTRSSG
CYKAEFEFCG	
C_elegans_rpi	.....
.....	
a_thaliana_hyp.RPI	.....
.....	
E.coli_RPIA	.....
.....	

U. maydis	SQQSGPRKMA SSNATNSTSA ASAANTNSSA FKSaelaals
GVDAAKRAAA	
S_pombe_144_12	..... MDSAekkld. ....LS
PIDLAQRLAC	
S_c_RKI1	..... MAAGVPKIDA LE....SLGN
PLADAKRAAA	
mouse_rpi	.....MS
KADEAKKLAS	
drosophila_RPI	QQAACKGRLY KCNTIESEN LSGAAATLHT QIR..MMDDI
ALDAAKKTAA	
C_elegans_rpi	.....MVTS TGP..EAELA
PIEQAKKRAA	
a_thaliana_hyp.RPI	.....MAL AYDPLFITS D KSLSAFDVAS SPP..QPMNL
TQDELAKRIAA	
E.coli_RPIA	.....M
TQDELAKAVG	

U. maydis	YAAVDNHVK. PQHEIIGTGS GSTVPPYVVER IAQ..QGPav
N...AKRWFV	

Fig. 10B

S_pombe_144_12	HMVDENYP.	ENPKVIGIGS	GSTVYVVER	L...LTKPG.
...VDSVFI				
S_c_RKI1	YRAVDENLKF	DDHKIIGIGS	GSTVYVVAER	IGQYLHDPKF
YEASKFICI				
mouse_rpi	HTAVENHVKN	N.:QVLIGIGS	GSTIVHAVQR	IAERVKQEN.
....LDLICV				
drosophila_RPI	RTAVDQWVTE	DT.KILIGIGS	GSTVYVAVQR	IAERVWKEGE
...LTDLICV				
C_elegans_rpi	FACGEKYVQS	G..CRLGVCS	GSTVKYLVEY	LKQGFQNGS.
...LKDIICV				
a_thaliana_hyp.RPI	YKAVEFVES.	G..MVLGLGT	GSTAKHAVDR	IGELLRQ GK.
...LENIVGI				
E.coli_RPIA	WAALQYVQP.	G..TIVGVGT	GSTAAHFIDA	LG...TMKG.
....QIEGAV				

U. maydis	PTGFGSRELI	INAGLRLGDV	DSFPSIDVTI	DGADEVDNAL
NCIKCCGACH				
S_pombe_144_12	PTGFGSKOLI	MNGLRLGDP	DCYPNVDSF	DGADEVDDNL
QCIKCCGAGL				
S_c_RKI1	PTGFGSRNLI	LDNKLQLGSI	EQYPRIDIAF	DGADEVDBNL
QLIKCCGAGL				
mouse_rpi	PTSFQAROLI	LQGLTSLDL	DQHPEIDLAI	DGADEVDAEL
NLIKCCGGGL				
drosophila_RPI	SSYQARHLL	LDYNLNLGDL	DRNPNIIDVAI	DGADEVDRHM
VLIKCCGGGL				
C_elegans_rpi	PSFLTKQWL	IESGLPVSDL	DSHPELDVCI	DGADEVGQF
TCIKCCGGGL				
a_thaliana_hyp.RPI	PSKKTQEQ	LSLGIPLSDL	DAHVIDLSI	DGADEVDPFL
NLVKGRGGSL				
E.coli_RPIA	SSSDASTEKL	KSLGIHVFDL	NEVDSLGIYV	DGADEVINGHM
QMIKCCGAAL				

U. maydis	LRKVLAEAA	NEFWADYR	KNG.SQLCTK	WLQCVPTLVA
PFAY...AKV				
S_pombe_144_12	FOEKLIAFLA	KRLVYVDSR	KNS.HVLGEY	WKKGVPTLVM
PMAY...ASI				

Fig. 10C

CS-7861/LeA 36,055
Peter Schreier et al

S_c_RKI1	FOEKLVTSA	KTEIIVADSP	KKSPKHIGKN	WROGVPIETV
PSSY...VRV				
mouse_rpi	TOEKIVAGYA	SREIIVADFP	KDS.KNIGDR	WHKCTPIETI
PMAY...VPV				
drosophila_RPI	LQEKVVASCA	KHEIIVADYT	KNS.IRIGEQ	WCRCVPIETVA
PMAY...VPI				
C_elegans_rpi	AOEKIVQTAA	KNFYIADYL	KDS.KHIGDR	YPN.VPIETVL
PLAA...QPL				
a_thaliana_hyp.RPI	LRKMIEGAS	KKEIIVVDDS	KMV.KHIGGS	KLA.LPIETIV
PFCWKFTAEC				
E.coli_RPIA	TRKIIASVA	EKEICIADAS	KQV.DILG..	.KFPLPIETVI
PMAR...SAV				

U. maydis	LQNLKK.MGS	DKAVLRMG.K	AKAGPVIIDN	GNEIICIDAPFP
E.AQMKDPSD				
S_pombe_144_12	LPQOLVE.LGA	IEPKLRMGAP	GKAGPVIIDN	GNEIICIDAHF.
..GLIKNPKE				
S_c_RKI1	KNDLLEQLHA	EKVDIRQGS	AKAGPVIIDN	NNFIICIDADF.
..GEISDPRK				
mouse_rpi	SRAVAQKEGG	E.VELMA.V	NKAGPVIIDN	GNEIICIDWKF.
..DRVHKWSE				
drosophila_RPI	KLHIEALFGG	E.ASLRMA.K	VKAGPIIIVDN	GNEIICIDWKF.I
A.NREYDWDE				
C_elegans_rpi	LRSIPRAEGG	S.COLRQA.V	KKCGPIIIVDN	GNEIICIDWQFE
KNVSGRDWFA				
a_thaliana_hyp.RPI	LRSLLEGYGC	E.ANLRLG..	EKGKAFIIVDN	GNYIICIDMHVE
..EDMGDLGA				
E.coli_RPIA	ARQLVK.LGG	R.PEYRQG..	.....VVIIDN	GNIICIDVHG.
..MEILDPIA				

U. maydis	LLKRIKLLTG	WIEVGLFCN.	ICKSAYTCND	DGTITIKTAA
G.....D				
S_pombe_144_12	LFKIKLLVG	WIEVGLFCD.	MISAVTEGSK	DGSVTVKKAS
GEKHIIPAPV				
S_c_RKI1	LHREIKLLVG	WIEVGLFID.	NASKAVTEGNS	DGSVEVTEK.

CS-7801/LeA 36,055
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Fig. 10D

mouse_rpi	VNTAIKMTPG	VDTCLEIN.	MAERVYFGMQ	DG	SVNVREKP
F.....					
drosophila_RPI	VNRAITLIPG	VDTCLEVN.	MAHKCYFGMA	NG	SVKVQNK.
.....					
C_elegans_rpi	IQORLANTPG	VDTCLEIG.	CVDVFFAYS	DG	SVKEIVNS
KKH.....					
a_thaliana_hyp.RPI	VSDAILRLPG	VDHGMFLD.	MASTVIIAGE	LG	VKIKNKH
.....					
E.coli_RPIA	MENAINAIPG	VDTVGLEANR	GADVALIGTP	DG	VKTIVK.
.....					

U. maydis.	VQEGVHFDVS	KAPATA....
S_pombe_144_12	TAAANEVDAK	VAETNAKPLN
S_c_RKI1	.....	.....
mouse_rpi	.....	.....
drosophila_RPI	.....	.....
C_elegans_rpi	.....	.....
a_thaliana_hyp.RPI	.....	.....
E.coli_RPIA	.....	.....

Fig. 11A

CG-7861/LeA.3L,055
Peter Schreier et al

U_m_RPI1	MQSRLLSLVS	SHLVSKRCFI	ARSAALAPLL	LHPQRLRLTC
PRSFSSQQSG	.....	.....	.....	.....
SPAC144_12	.....	.....	.....	.....
.....
SC_RKI1	.....	.....	.....	.....
.....
CRYNE_001022	.....	.....	.....	.....
.....
CANAL_Contig6-2195	.....	.....	.....	.....
.....
embl.CNS06G7H	.....	.....	.....	.....
.....
NEUCR_contig	.....	.....	.....	.....
.....
embl.CNS06MQK	.....	.....	.....	.....
.....
embl.CNS06EST	.....	.....	.....	.....
.....
embl.CNS0766C	.....	.....	.....	.....
.....
embl.CNS06ZNB	.....	.....	.....	.....
.....
embl.CNS06ZLP	.....	.....	.....	.....
.....
embl.KLAJ9603	.....	.....	.....	.....
.....
U_m_RPI1	PRKMASSNAT	NSTSAASAAN	TNSSAFKSAE	LAALSGVEA
KRAAAYAAMD	.....	.....	.....MDSA EK	KLDLSPIEL
SPAC144_12	.....	.....	.....	.....
KRLACHMAVD	.....	.....	.....M	AAGVPKIDAL
SC_RKI1	.....	.....	.....	ESLGNPLED
KRAAAYRAVD	.....	.....	.....	.....
CRYNE_001022	.....	.....	.....	.....
.....
CANAL_Contig6-2195	.....	.....	.....	MSSTSKVES
KKLAAYKAVD	.....	.....	.....	.....
embl.CNS06G7H	.....	.....	.....	.....

CS-7861/LeA 36,055
Peter Schreier et al

```

U_m_RPI1          NHVK.PQHEI  IGTGSGSTMP YWVERLAQQG .....PAVNA
KRWFVPTGFG       ENYP.ENPKV  IGTGSGSTMP YWVERLLT.. .....KPGVD
SPAC144 12       ENLKFDHDKI  IGTGSGSTMP YVAERI GQYL  HDPKFYEVAS
SVVFLPTGFG       .....QQQV  IGTGSGSTMP YVVDRI LAQG  .....FEANK
SC_RKI1          ENFP.KDAKV  IGTGSGSTVI YAAERI GQ.. .....LDNKD
KFICPTGFG       .....EHKI  IGTGSGSTVI YVAERI GQYL  QDSQYSDLVS
CRYNE 001022     EHLS.PTYRH  IGTGSGSTVI HAMDVI SKLG  .....TTITG
DRVFLPTGFG       .....          .....          .....
CANAL Contig6-2195  .....QHRV  IGTGSGSTVI YVAERI GQYL  RDDEYRDYVS
SFICPTGFG       .....          .....          .....
embl.CNS06G7H    .....          .....          .....
KFVCLPTGFG       .....          .....          .....
NEUCR contig     .....          .....          .....
PMTFYPTGFG       .....          .....          .....
embl.CNS06MQK    .....          .....          .....
.....           .....          .....          .....
embl.CNS06EST    .....          .....          .....
KFKCVAICYG       .....          .....          .....
embl.CNS0766C    .....          .....          .....
.....           .....          .....          .....
embl.CNS06ZNB    .....          .....          .....
.....           .....          .....          .....
embl.CNS06ZLP    .....          .....          .....

```

Fig. 11C

CS-7861/LeA 36,055
Peter Schreier et al

.....
embl.KLAJ9603
.....

U m RPI1

IKGGGACHLR

SPAC144_12

IKGGGACLQ

SC RKI1

IKGGGACLQ

CRYNE 001022

IKGGGACQLR

CANAL Contig6-2195

IKGGGACLQ

embl.CNS06G7H

IKGGGACLQ

NEUCR contig

IKGGGACLLQ

embl.CNS06MQK

IKGGGACLQ

embl.CNS06EST

IKGGGGLQ

embl.CNS0766C

IKGG.....Q

embl.CNS06ZNB

IKGGGACLQ

embl.CNS06ZLP

IKGXGAXLQ

embl.KLAJ9603

.....VQ

U_m_RPI1

SPAC144_12

SC_RKI1

CRYNE_001022

.....
SRELLINAGT RIGDV.ESFP ...SFDVTIDG ADEVDNALNC

SKOLLTVNNGT RIGDP.DCYP ..NVDMSFDG ADEVDNQLQC

SRNILLDNKT QIGSI.EQYP ..RIDIAFDG ADEVDENQL

SKELLVKAGT TIGDV.DQYA ..RIDVTIDG ADEVDNEINS

SKOLLIDNGT RIGTI.EQYP ..DIDIAFDG ADEVDPOINL

SRNILLDNKT QIGSI.EQYP ..RIDIAFDG ADEVDENQL

SRDLTQAAGF RIGYLS.DLSP GHADVCFDG ADEVDPAINL

I...I.DQYP ..NVDIAFDG ADEVDANIQL

SKOLLMDNGT TYAIL.EQHP ..HIDIAFDG ADEVDENIDL

.RQLIDNWX RLGST.EEYP ..EIDIAFDG ADEVDENLGL

.....I.YH ..EIDIAFDG ADEVDENQL

.....EQYP ..EIDIAFDG ADEVDENQL

.....

EKVLAEAAE EAVVADYRKN G.SOLGT...

EKVLAEAAE EAVVADSRKN S.HVIGEY...

EKVLAEAAE EAVVADSRKN SPKHGKN...

EKVLAEAAE EAVVADYRKN S.EVIGTSVR AFLSCLEDQT

CS-7861/LeA36,055
Peter Schreier et al

Fig. 11D

NAMSLFSLYL

CANAL_Contig6-2195

EKLVAASAKK EKLVAADYRKK SDK.EGQL.. ..

embl.CNS06G7H

EKLIVSTSAKT EKLIVADSRKK SPKHGKN.. ..

NEUCR_contig

EKLIVATAARK EKLIVADSRKI S.NHIGTQ.. ..

embl.CNS06MQK

EKLIVSTSTDK EKLIVADSRKK SPQYIGTS.. ..

embl.CNS06EST

EKLIVSTSAKI EKLIVADTSKK SPRRIGSH.. ..

embl.CNS0766C

EKLIVAACSKQ EKLIVADYRKK T.GVIGKG.. ..

embl.CNS06ZNB

EKLIVSTSAKK EKLIVADSRKR SPKHGKN.. ..

embl.CNS06ZLP

EKLIVXTXAKK EKLIVADSRKR XXXKHGKN.. ..

embl.KLAJ9603

EKLIVSTSAKK EKLIVADSRKK SPKHGKN.. ..

U_m_RPI1

..... KILQG VPLEIVAFAM AKVLQN....

SPAC144_12

..... WKKG VPLEIVPMAM ASILPQ....

SC_RKI1

..... WRQG VPLEIVPSSY VRVKND....

CRYNE_001022

FIRFPMTPIE LIASPKWTKG IPLEIVPFAM AKVLTN....

CANAL_Contig6-2195

..... WRQG VPLEIVPNSY SKIIQE....

embl.CNS06G7H

..... WRQG VPLEIVPSAY VRVKND....

NEUCR_contig

..... WKKG IPLEIVPMAM PQVLGE....

embl.CNS06MQK

..... WKKG VPLEIVPSSY VRVSKD....

embl.CNS06EST

..... IVQG VPLEIVPAAY NRVDQD....

embl.CNS0766C

..... WRKG VPLEIVPAAY TKVSLD....

CS-7861/LeA.36,055
Peter Schreier et al

Fig. 11E

.....
embl.CNS06ZNB

.....WKRG VPTEVLPSSY VHVLTAAAA

.....
embl.CNS06ZLP

.....WKRG VPTEVLPSSY DRAVARAAAA

KRGPWLRITA

embl.KLAJ9603

.....WKKG VPTEVLPSSY VRVLSDAAAA

.....

U_m_RPI1

.....

.....
SPAC144_12

.....

.....
SC_RKI1

.....

.....
CRYNE_001022

.....

.....
CANAL_Contig6-2195

.....

.....
embl.CNS06G7H

.....

.....
NEUCR_contig

.....

.....
embl.CNS06MQK

.....

.....
embl.CNS06EST

.....

.....
embl.CNS0766C

.....

.....
embl.CNS06ZNB

.....

.....
embl.CNS06ZLP

TSSLTLTFGE ..IADPRKLH QDIKMLVGVV ETGLFIDNAE

KAYFGSPDGS

embl.KLAJ9603

.....

.....

U_m_RPI1

.....L KKMGS.....DKAVLRM

GKAYAG..PV

SPAC144_12

.....L VELGAI.....EPKLRMG

Fig. 11F

APGKAG..PV	
SC RKI1	.....LL EQLHAE.... ...KVDIRQG
GSAGAG..PV	
CRYNE 001022	.....L AHMGSPHVLP NGQPGLSLRM
GKMAG..PV	
CANAL Contig6-2195	.....LS KKLGA.... ...NVDLRQG
GKAG..PI	
embl.CNS06G7H	.....LL EQLHAD.... ...KVDIRQG
GSAGAG..PV	
NEUCR contig	.....L ERLGRL.... ...SAQVRSG
LPGKAG..AC	
embl.CNS06MQK	.....LR EKLGSR.... ...KAEVRQG
GSAGAG..PV	
embl.CNS06EST	.....LL NLLGAK.... ...TATLRQG
GKVKMG..PV	
embl.CNS0766C	.....L VKLGG.... ...KPVVRSG
LPAKAG..PV	
embl.CNS06ZNB	.....LK DRLHCK.... ...SAIVRQG
GSAGAG..PV	
embl.CNS06ZLP	VELQLKCCPV PMWHVLTALK DRLHCK.... ...SAIVRQG
GSAGAG..PV	
embl.KLAJ9603	.....LK NKLNCK.... ...SAMVRQG
.....	

U m RPI1	VDNGNEIID APPEAQMKD PS..... ...DLKR
KLITGVLEV	
SPAC144 12	VDNGNEIID AHGLIK..N PKE..... ...FAK
KLITGVLEV	
SC RKI1	VDNNNEIID ADGE..ISD PRK..... ...HRE
KLITGVLEV	
CRYNE 001022	VDNGNEIID APFAEELMRQ PEE..... ...VLHK
KLITGVLEV	
CANAL Contig6-2195	VDNNNEIID ADGEIEIDN VGK..... ...HEQ
KLITGVLEV	
embl.CNS06G7H	VDNSNEIID ADGE..IKD PRT..... ...HRD
KLITGVLEV	
NEUCR contig	VDNGLRIVD AVKPLLTEL PEGKQEGEG VWTVDGARR
KLITGVLEV	
embl.CNS06MQK	VDNSNEIID ADGEIQ..D PKK..... ...HQD

Fig. 11G

CS-7861/LeA 36,055
Peter Schreiber et al

IKMIVGVET
embl.CNS06EST
IKMIVGVET
embl.CNS0766C
IKMIVGVET
embl.CNS06ZNB
IKMIVGVET
embl.CNS06ZLP
.....
embl.KLAJ9603
.....

U_m_RPI1
QEGVHFDVSK
SPAC144_12
HIIPAPVTAA
SC_RKI1
.....
CRYNE_001022
.....
CANAL_Contig6-2195
.....
embl.CNS06G7H
.....
NEUCR_contig
.....
embl.CNS06MQK
.....
embl.CNS06EST
.....
embl.CNS0766C
.....
embl.CNS06ZNB
.....
embl.CNS06ZLP
.....
embl.KLAJ9603
.....

VTDNNEILD THGD..IDD PKK..... THDN
VTDNNEILD CDGEIPPAQ VAE..... TNAK
VTDNNEILD ADGE..IAD XRK..... HQD
VTDNNEILD AD.....
.....
.....
.....
GLFCNI.... CK SAYEGNDGT ITIKTAAGDV
GLFCDM.... IS AVFGSKDGS VTVKKASGEK
GLFIDN.... AS KAYFGNSDGS VEVTEK....
GLFCGM.... AK AAYFGNE.....
GLFTNM.... AN KAYFGEDGS VSV.....
GLFIDN.... AS KAYFGNSDGT.....
GLFYGKSGLE VESGGAQKPV AAYFGMEDGS VMVQT.....
GLFIDN.... AC KAYFGNADGT VEV.....
GLFIGN.... AA KAYLSPDGD VLI.....
GLFVSL.... AS KAYIGNADGT ITKKT.....
GLFIDN.... AE KAYFGSPDGS VELQ.....
.....
.....

Fig. 11H

U_m_RPI1	APATA.....
SPAC144_12	ANEVDAKVAE TNAKPLN
SC_RKI1	.....
CRYNE_001022	.....
CANAL_Contig6-2195	.....
embl.CNS06G7H	.....
NEUCR_contig	.....
embl.CNS06MQK	.....
embl.CNS06EST	.....
embl.CNS0766C	.....
embl.CNS06ZNB	.....
embl.CNS06ZLP	.....
embl.KLAJ9603	.....

CS-7861/LeA 36,055
Peter Schreier et al

Fig. 12

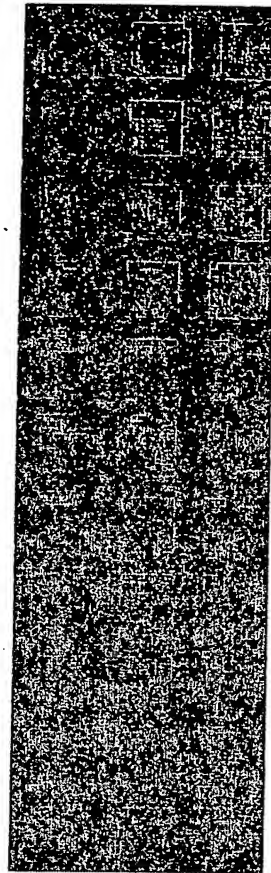


Fig. 13

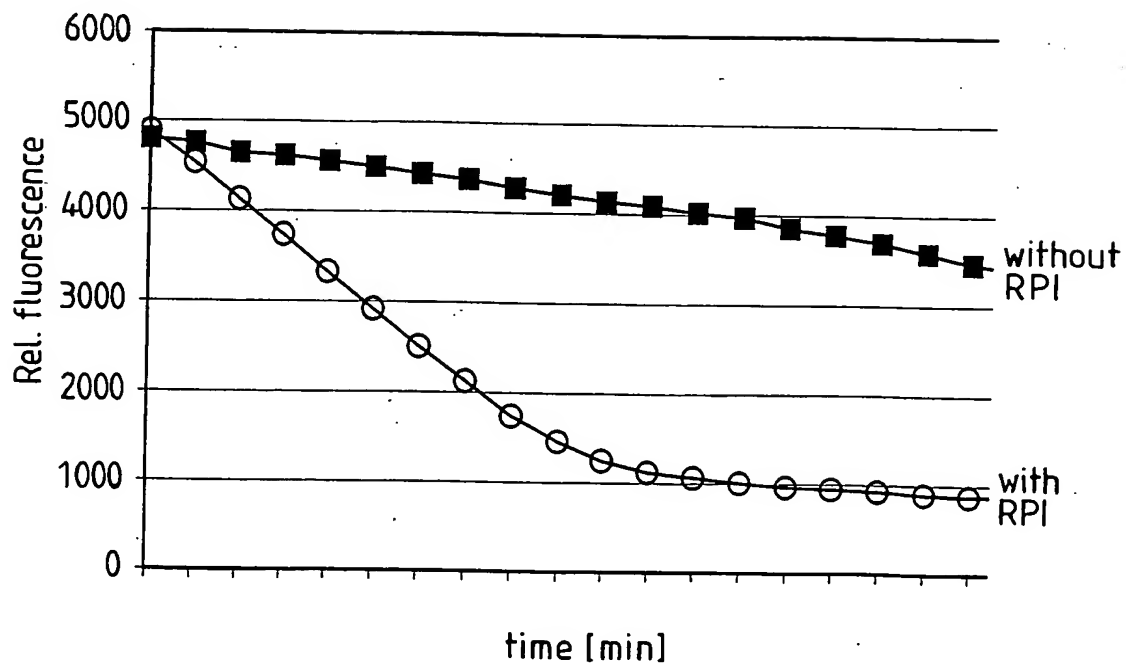


Fig. 14

